

I CLAIM:

1. An electrical connector for mounting on a printed circuit board, comprising:

an elongated insulative housing defining an uninterrupted central slot along a lengthwise direction thereof, the housing comprising a base portion and opposite first and second lengthwise walls extending from the base portion and being located at opposite longitudinal sides of the central slot, the first lengthwise wall having a first mating section, a second mating section and a recess defined between the first and second mating sections, the second lengthwise wall having a third mating section in alignment with the recess of the first lengthwise wall, each mating section defining a plurality of passageways extending therethrough; and  
a plurality of contacts received in the housing.

2. The electrical connector as described in claim 1, wherein the thickness of the first lengthwise wall is larger than that of the second lengthwise wall.

3. The electrical connector as described in claim 2, wherein the third mating section of the second lengthwise wall protrudes outwardly from an outer face thereof.

4. The electrical connector as described in claim 1, wherein the first mating section has a longitudinal dimension larger than that of the second mating section.

5. The electrical connector as described in claim 1, wherein the contacts comprise first contacts received in the first mating section for transmitting power, second and third contacts respectively received in the second and the third mating sections for transmitting signal.

6. The electrical connector as described in claim 5, wherein the contacts are substantially identical in structure and each contact comprises a contact portion with a curved contact end exposed in the central slot of the housing, a board retention portion extending outwardly from the housing, and a housing retention portion connecting the contact portion and the board retention portion.

7. The electrical connector as described in claim 6, wherein the board retention portions of the first contacts, the second contacts and the third contacts are arranged in two rows, respectively.

8. The electrical connector as described in claim 7, wherein the board retention portions of the contacts are configured for press-fitting in holes of the printed circuit board.

9. The electrical connector as described in claim 6, wherein the base portion of the housing defines upper and lower rows of cavities communicating with respective passageways defined in the first and second mating sections and a row of slits communicating with respective passageways defined in the third mating section, and wherein the housing retention portions of the first and second contacts are retained in the cavities and the housing retention portions of the third contacts are retained in the slits.

10. The electrical connector as described in claim 9, wherein the upper and lower rows of cavities are staggeredly arranged with each other.

11. The electrical connector as described in claim 1, further comprising a pair of guiding posts protruding from the base portion and a pair of board retention pegs protruding from the base portion and extending along a direction away from the guiding posts.

12. The electrical connector as described in claim 11, wherein the board retention pegs each have a plurality of protrusions extending along a lengthwise direction on a periphery surface thereof.

13. The electrical connector as described in claim 1, wherein said base portion defines a transverse dimension which is larger than another transverse dimension which is defined by said first and second lengthwise walls commonly.

14. An electrical connector comprising:

a rectangular base portion including a long longitudinal dimension along a longitudinal direction, and a small transverse dimension along a transverse direction perpendicular to said longitudinal direction,;

opposite first and second elongated side walls formed upwardly from said base portion along and extending along said longitudinal direction; and

a plurality of first contacts disposed in the first side wall, and a plurality of second contacts disposed in the second side wall and offset from said first contacts along said longitudinal direction; wherein

an interior surface of said second side wall keeps planar while that of the first side wall defines a recess in alignment with said second contacts in the transverse direction.

15. The connector as described in claim 14, wherein said longitudinal dimension and said transverse dimension commonly define a smooth and uninterrupted rectangular periphery of the base portion with a complete linear edge on each side of said rectangular periphery.

16. The connector as described in claim 14, wherein the transverse

dimension of the base portion is larger than another transverse dimension which is defined by said opposite first and second side walls commonly.

17. The connector as described in claim 14, wherein said second side wall is thinned except thereof a portion receiving the second contacts.

18. The connector as described in claim 17, wherein said second side walls defines a lower portion adjoining the base portion, said lower portion being thicker than other thinned portions.